1 Brief Report

My design slightly differs from my final FdS sheet, the reason being is that I found out that some of the concepts I was focusing on in my FdS sheet, such as the stained glass windows, were more focused towards a lighting algorithm and really didn't have much to do with shadows, so instead I focused on the other concepts, which were the projection and translation of a shadow.

The animation is split into multiple scenes with one or more objects which, translate, rotate across a plane with a static light source, in addition a scene where the light source translates around a static object. There are multiple combinations such as translate X, translate Y, translate Z as well as combinations such as translate X and Z.

The goal is to see how a shadow recalculates and how a shadow changes when a object moves across, or towards or away from a light source, observing how the shadow grows, shrinks or changes shape. As well as seeing how an object and its shadow affect the projection of other objects and their shadows.

One of the concepts I could not get working correctly was having multiple light sources in a single scene, I kept encountering strange errors where the shadow would render on objects and not on the plane, after countless hours I decided not to include it in my report.

The animation flows well, apart from a sections where the object would change or just instantly translate to the other side for the next scene, I could of added more scenes in between for a 'transition period' where say you would see the spheres fly in from the abyss onto the plane etc..

I did not implement different shadow algorithms, such as soft shadows or just different shadowing techniques such as shadow volumes.